

Annual MSP Progress Report

Covanta Haverhill, Inc.
RR0128.008

Reporting Year 2005

In accordance with 310 CMR 7.08(2)(i) and the Material Separation Plan Guidance for Municipal Waste Combustors, please find attached the annual progress report for reporting year 2005. This report documents the efforts and progress to date on educating the public to the hazards associated with mercury and programs designed to facilitate removal of mercury from the waste stream.

Format for Mercury MSP Annual Reports

In 2004, the Integrated Waste Services Association and its members: American Ref-Fuel, Covanta Energy and Wheelabrator Technologies, together with MA DEP, agreed on the following reporting format for Annual Reports of their respective Material Separation Plans submitted to the MA DEP. Beginning with the 2005 Reporting Year (January – December, 2005), facilities are submitting their Annual Reports containing information as described below.

I. Summary of Plan Activities

This summary may mirror the MSP Plan description, and would include notations of changes or alterations to that Plan description for the activity that do not rise to the level of an amendment to the plan. The description includes the following information where applicable:

- a. Summary/Goal of program/activity/task;
- b. Problems/issues experienced while trying to implement program/task;
- c. Changes to program between proposal and implementation, if appropriate;
- d. Manner of contacting appropriate audience, advertising, or providing notice of the program;
- e. Duration of program;
- f. Proposed number of individuals or organizations to be contacted, if appropriate for that task (from Plan description);
- g. Actual or estimated number of individuals or organizations contacted, if appropriate;

II. Spreadsheet Summary of Mercury-Containing Products Collected for Each Community

The listing will be sorted as follows:

- Listing by community or targeted audience, e.g., town, school, etc.;
- Type of product collected;
- Quantity of each product collected, and weight of mercury collected by product type.

III. Spreadsheet Summary of Mercury-Containing Products Collected for Each Program/Activity

The listing will be sorted as follows:

- Listing by program/activity/task, i.e., school cleanouts, thermometer exchanges household hazardous waste collection days;
- Total amount of products and total weight of mercury collected.

IV. Spreadsheet Summary of MSP Budget and Expenses

The Report shall provide, at a minimum, a summary of the budget for programs and actual program costs sorted as follows:

- Administration Costs;
- Education Costs of IWSA, listed by program;
- Individual Program/Activity/Task Costs;
- Other Costs broken out as appropriate.

I. Summary of Plan Activities

During 2005, Covanta Haverhill, Inc. (Covanta) continued the implementation of the third Material Separation Plan for Mercury Containing Products (MSP III). The MSP III, with minor variations, is a continuation of the goals and programs of the MSP II. As stated in the MSP III, various Hg collection and outreach activities continue to be conducted in the Covanta contract communities. In addition, other activities continue to be conducted with the hope of impacting and educating a broader population base. The following is an outline of the activities that were conducted between January 1, 2005 and December 31, 2005. Also included, where possible, is a quantification of the success of the activity. Where results of activities that were conducted are of a more subjective nature, we will attempt to indicate a level of success/participation.

At mid point of 2005, Covanta evaluated each of the activities and their progress. Based on this review, minor changes to the budgets were made to ensure continued progress. These changes were coordinated through our MA DEP contact, Ms. Brooke Nash. On July 19, 2005, Covanta received confirmation from Ms. Nash that these changes were acceptable.

On July 1, 2005, the towns of Chelmsford, MA and Seabrook, NH were no longer contract communities for Covanta Haverhill. MSP programs in those communities have been wrapped up.

Also, in 2005, the town of Harvard, MA became a Covanta Haverhill contract community. In second half of 2005, the MSP activities were introduced into Harvard and will continue in the future.

1. Mercury Products Collection Routes

a) Goal: The primary goal of this activity was to create and coordinate a collection route system between a mercury recycler (Onyx Environmental, Complete Recycling Solutions, etc.) and the large generators of mercury content bulbs (fluorescent, HID, Metal-Halide etc.).

b) Problems: Problems that were encountered in this program continue to be the inability to speak one-on-one with the appropriate contact at each business and adequately explain our program.

c) Changes: There were no major changes in this activity. Covanta continued to work with large generators as they were found, but they will not be a specifically targeted area for our resources. This program was incorporated into the outreach for Mercury Product Events in the target city/towns.

d) Outreach: From experimenting with mailings and telemarketing, little response was realized. The focus for 2005 was to personally visit businesses, both large and small, prior to Mercury Product Events. Small generators of bulbs (36 or less) were invited to bring their bulbs/mercury products to the event. Those with greater than 36 bulbs were assisted in contacting Onyx for their mail in program, OnyxPac. Covanta offered to offset costs with a 50% reimbursement to those companies. The MSP coordinator devoted a full day to visit businesses in each community before each event which resulted in outreach to

most of the possible participants. This also educated those businesses that have not collected bulbs in the past to set up a recycling program.

e) Duration: This approach was used throughout 2005 for the planned events in the target communities.

f) See above

g) The count of visits made and responses were tabulated. Over 450 visits were conducted by the MSP coordinator.

2. Mercury Product Collection Events

a) Goal: These events were designed to target and facilitate the collection of mercury and mercury bearing products from small businesses and residents of the Covanta contract municipalities. While larger businesses are allowed to participate, a separate program that was discussed earlier in this report was available and designed to more appropriately meet and satisfy their needs for the collection of mercury bearing wastes.

A tremendous amount of effort was expended on this activity in 2005. By the end of the year, almost all of Covanta's communities were being offered access to these events. The following Covanta communities had extensive education and outreach conducted in their respective business communities: Harvard, Ayer, Reading, Stoneham, Salem, NH, Haverhill, Lawrence, Chelmsford, Danvers, Essex, Groton, Littleton, Middleton, and Wakefield. A total of twenty five (25) collection events were held within these communities.

b) Problems: In general, response was minimal at many of the events. However, progress was made throughout the year as events were repeated.

c) Changes: Changes included increasing the number of ads placed, increasing the door to door visits prior to events, and the consolidation of three local towns into regional event. The budget was increased for this activity to cover additional advertising costs. This change was coordinated with MA DEP in the July submittal. Money was transferred from the Marina activity which was phased out.

d) Outreach: Ads were placed in weekly papers, a daily newspaper and Saturday/Sunday editions prior to events. Additional notices were mailed out with electric bills (Littleton), mailings with businesses associations (Chelmsford), and the use of local cable. MSP coordinator also handed out flyers in the applicable towns during his door to door visits.

e) Duration: Events were conducted from April to October. Outreach began in weeks prior to events and continued through the year whenever the MSP coordinator made presentations.

f) See above

g) Notices were distributed by MSP coordinator to the over 450 contacts that were made.

3. Thermometer Exchanges

a) Goal: The goal of this activity is to help educate people on dangers of mercury type thermometers, help residents safely recycle these devices and provide them with safe non mercury replacements.

In 2005, Covanta was able to bounce back from the obstacles to this activity that were seen in 2004.

On going exchanges were conducted throughout 2005 at a number of different locations, such as Boards of Health (Haverhill, Reading, Melrose, Middleton, Essex, Wakefield), Departments of Public Works (Haverhill, Littleton, Lynnfield), and Transfer Stations (Groton) with a variety of results and participation. These were conducted by municipal employees and were largely successful because of Covanta's supply of digital thermometers for a one-to-one swap.

In addition, special thermometer swap events were staged during the year. This consisted of conducting an exchange at a central location for a 2 hour period. This exchange was advertised in local newspapers. During 2005, this activity was conducted in nine communities: Ayer, Essex, Groton, Littleton, Melrose, Middleton, Stoneham, Wakefield, and Salem, NH. In addition, exchanges at flu clinics held from October 2005 to the end of the year were conducted in all 15 contracted communities.

b) Problems: Fewer and fewer fever thermometers are being observed in the general public as they are being phased out with non mercury type devices.

c) Changes: No real changes between the MSP III.

d) Outreach: Advertising was conducted in all local papers prior to a special swap event. Also, MSP coordinator handed out notices at flu clinics.

Covanta has continued to rely on cooperation from various town and private agencies to promote the thermometer exchanges. It has been recognized that each community differs in the organizations that are active. Chamber of Commerce, The Rotary, Business Associations, etc are just some of the resources that have been utilized.

e) In 2005, Covanta offered this program throughout the year.

f) See above

g) See above

4. Municipal Reimbursement for Mercury Program Expenses

a) Goal: To assist communities with the costs associated with mercury product recycling, Covanta continued to reimburse any Covanta contract community for the costs incurred in collection, storage and recycling of residentially and/or municipally generated mercury containing products (fluorescent lights, thermostats, thermometers etc.), products collected at one-day HHP events or at permanent facilities (either permanent HHP centers or Universal Waste Sheds).

Universal Waste Sheds, provided by Covanta, were also introduced at transfer stations in Ayer, MA and Salem, NH. (Spent mercury products were not collected at these transfer stations before installation). After installation of the shed, training was provided to staff to safely handle these products. Currently, all of Covanta's communities now have these sheds with the exception of Wakefield. This town has informed Covanta that they are currently not interested.

Through the outreach efforts of the MSP coordinator, Covanta continues to improve in this program.

b) Problems: Although this program continues to be successful, frequent turnover of personnel in DPW operations causes some confusion. Regular education as to the benefits of the program is necessary. The offer of storage sheds and the explanation of reimbursement are reviewed periodically.

c) Changes: No major changes.

d) Outreach: Covanta has found that communication solely by telephone or fax doesn't create the level of partnership necessary to have a viable program. Visits to transfer stations, town hall offices, and the quarterly recycling coordinator's meeting helps the members understand that mercury product recycling is a team effort. The request for reimbursement also allows Covanta to document mercury recycling efforts. Communication with the municipalities on a regular basis allows the goals of this program to be realized.

e) Duration: This program continued throughout the year.

f) See above

g) Beyond the 15 recycling coordinators, there are people with various functions within their community that take an interest and take a part in assisting the program. Volunteers are included in this list.

5. Thermostat Collection Program

a) Goal: Early on, it was recognized that a significant portion of mercury contained in the municipal waste stream was entering through the improper management/disposal of mercury containing thermostats. While programs do exist for the recycling and reclamation of these products, participation by HVAC technicians, trades people and consumers is limited, at best. The goal of this activity is to promote thermostat recycling by educating, providing recycling incentives and assisting area tradesmen.

In 2005, a major level of success was realized as tradesmen and electrical/plumbing supply stores agreed to join the program directly through Covanta. During 2005, the number of participating trades/suppliers was expanded from 23 to 53. A list has been compiled of air conditioning/electrical/plumbing/mechanical tradesmen in contracted communities that are contacted periodically by phone, mail, and personal visits to solicit for the program.

The \$5/thermostat bounty appears to be sufficient, but many tradesmen that are contacted tell us that they change thermostats very infrequently. In 2005, 931 thermostats were collected and recycled.

b) Problems: It was found that Thermostat Recycling Corporation's (TRC) had limited availability - it was only available at the wholesale level (not readily available to do-it-yourselfers) and the program was not advertised/marketed extensively in the communities where it is available. Poor recruitment efforts by the Thermostat Recycling Corporation, the initial cost of registering for the program and a lack of education/outreach to the HVAC trades people are among the reasons consistently mentioned for the low participation and limited collection numbers.

c) Changes: Covanta has entered into an agreement with Complete Recycling Solutions (CRS) of Fall River, MA to supply pails in which generators of spent thermostats can collect them. When full, the generator will call Complete Recycling for pickup.

As an inducement, Covanta has agreed to pay a \$5 bounty to the generator for each thermostat. Covanta's proposal included the purchase of an inventory sufficient to supply all the wholesale distributors of thermostats within the Covanta contract municipalities that wished to participate in the program.

d) Outreach: The MSP coordinator personally contacted various tradesmen to promote the program. A notice was placed in the Plumbing, Heating and Cooling Contractors of Massachusetts (PHCC) Magazine "Connections".

e) This program continued throughout the year as the MSP coordinator contacted various tradesmen to promote the program.

f) See above

g) Over 53 tradesmen now participate in this activity. Over 145 tradesmen have been contacted.

6. Marina Mercury Device Collections

a) The goal of this activity was to target marinas and provide boat owners with outreach to properly manage any mercury containing devices they may generate such as bilge pump switches.

b) Despite efforts during 2005, only 3 marinas have been located in our plan area. None allow maintenance and none are generating mercury devices.

c) On July 19, 2005, George Drew of Covanta notified Brook Nash, Branch Chief, Recycling Program at DEP that this activity would not be continued for the reasons stated above. It was agreed that funds budgeted for this activity would be transferred to the school cleanout budget.

d) N/A

e) N/A

f) N/A

g) N/A

7. School Mercury Cleanouts

a) Goal of this activity was to work with our communities' schools to educate staff, assist in the safe removal of their mercury containing devices and replace those devices with safer alternatives.

In 2005, Covanta contracted with Todd Dresser, C.H.M.M. of Cuoco & Cormier to help assist us with school mercury cleanouts. Activities included: initial contact with school representatives, securing a participation agreement, conducting mercury inventory, coordinating the replacement of mercury products with non mercury equipment, arranging safe packing and pickup of mercury products, and follow-up.

This activity was very successful in 2005. Ten schools were surveyed and mercury products were located that were no longer in use or could be substituted with non mercury items. Covanta and Mr. Dresser supervised the removal of both Universal Waste Mercury Products as well as Hazardous Waste Mercury Products. The schools serviced were: Danvers Middle and High Schools, Littleton Shaker, Middle and High Schools, Melrose Middle and High Schools, Ayer Middle and High Schools, and Lynnfield High School. Over 70 pounds of mercury was removed.

b) Problems: No major problems were encountered. We did find that it does take some time and repeated effort to gain a school's confidence. But once finished, all have been pleased with the results.

c) Changes: Middle schools within the same town have also been targeted whenever mercury products were reported initial meetings.

d) With the assistance of recycling coordinators within the community, the proper school officials were identified. The program was explained/offered to the school system.

e) Duration: Efforts continued throughout the year.

f) See above

g) 10 school systems were included in this year's progress.

8. Regional Outreach/Education: IWSA Component

See Attachment 1.

9. Facility Level Outreach/Education Efforts

a) Goal: Along with the programs and activities described earlier in this report, Covanta conducted and/or participated in other outreach and educational activities designed to instruct the public on the problems associated with improper management of mercury containing products.

In 2005, there was a major increase in amount of outreach activities that were conducted by the MSP coordinator in our communities.

b) Problems: No major problems encountered.

c) Changes: One of the larger efforts was to continue to purchase advertising space on two school buses in Haverhill. Approved by MA DEP, Covanta has implemented this activity since 2004. Not only does this advertising present the mercury recycling message in a mobile way, but the majority of the money goes to the city schools. With this program, these buses not only carry the children (and the message) throughout the city of Haverhill each morning and afternoon, but are then scheduled for supplemental activities during the day. For field trips and school sports events, these buses travel throughout the state as well to neighboring states. In addition, these buses were utilized during the summer season for other programs.

d) Covanta sponsored educational booths at numerous environmental and business/Chambers of Commerce events including: The Massachusetts Municipal Association Annual Meeting and Trade Show in Boston MA; the Merrimack Valley Chamber of Commerce Spring into Business Expo, in Haverhill, MA., the Merrimack Valley Chamber of Commerce Fall Back to Business Expo in Andover, MA., EnviroExpo Conference in Boston, MA., the North Shore Chamber of Commerce Business Expo in Danvers, MA., Grotonfest in Groton, MA., and Summer Jamboree in Ayer, MA.

In addition, mercury presentations were made at the following clubs: Rod & Gun (Ayer, Danvers, Lawrence, & Littleton), Rotary Clubs (Groton, Haverhill, Littleton), and Kiwanis Club (Haverhill)

e) This outreach program continued through 2005 as described in MSPIII.

f) See above

g) See above

10. Medical and Dental Outreach

a) As mentioned previously, WasteCap of Massachusetts (WasteCap), was no longer able to assist in this effort; this outreach was not pursued in 2005.

Summary

Overall, the results of MSP III remained quite good. The amount of fluorescent bulbs recycled during 2005 and reported to Covanta was approximately 141,247 feet of fluorescent bulbs. Also 623 HID, and 3,233 u-tubes or compacts were recycled. Additionally, 120.7 pounds of elemental mercury, 8,024 thermometers, and 931 thermostats were collected and recycled. This does not include materials collected/aggregated but not yet shipped – materials located at/in a Universal Waste Shed or Board of Health office where collection activities are still on going.

Please note: No mercury containing debris weights are being reported this year, consistent with the DEP reporting format agreed upon in 2004.

ATTACHMENT 1
IWSA OUTREACH ACTIVITIES

**Material Separation Plan
For the Diversion of Mercury**

Annual Report

**Integrated Waste Services Association
(IWSA)**

January 2006

**Integrated Waste Services Association
Materials Separation Plan Activities
Annual Report on the Results of the Mercury Recovery Program**

1. Introduction

Integrated Waste Services Association's activities in support of Massachusetts' Waste-to-Energy Facilities' Materials Separation Plan for 2005 largely continues the direction set in prior years. This report describes the activities involved in the design, implementation and operation of IWSA's Program in support of the five waste-to-energy plants operating in Massachusetts and their Mercury Recovery Programs (MRP). Each facility's MRP is community focused, locally based and operated; and the IWSA activities are designed to support in a coordinated fashion the MSPs on a regional basis.

IWSA Regional Program activities for 2005 consisted of the following elements:

- Print & Radio Advertising for "Keep Mercury From Rising"
- Evaluation & Analysis of the "Keep Mercury From Rising" campaign
- Revision & Update of Website www.keepmercuryfromrising.org
- Availability of print and video materials to facilities, the public and media

2. Regional Education Program "Keep Mercury From Rising"

The Integrated Waste Services Association coordinated the regional education / outreach program for five Massachusetts' waste-to-energy facilities including facilities located in Saugus, North Andover, Millbury, Haverhill, and SEMASS.

a) Objectives

In 2005, the Regional Outreach Plan supported individual facility programs by the continued promotion of the media campaign, "Keep Mercury from Rising". This campaign included two waves of radio advertisements designed to reach the broadest possible audience. The campaign used targeted advertising educating the listeners about the concerns related to mercury. The advertisements also encouraged residents to contact their local health departments to receive more information about mercury and find out where in their communities they could dispose of mercury containing devices.

The objectives for 2005 were met and included the following:

- The Regional Outreach Program continued to raise awareness about mercury-containing products in the home and the proper handling and disposal of these products;
- The Program provided information and promoted local recycling events;
- The Program continued to build an integrated communications program that leveraged opportunities for incremental, free media, and worked synergistically with the efforts of individual waste-to-energy facilities.

b) Tactics

A public survey was completed in mid-2005 measuring the effectiveness of the educational campaign “Keep Mercury From Rising.” Findings from this survey guide the development of the Regional Program. The website, www.keepmercuryfromrising.org, continues to be more user-friendly, and includes more contact information and contractor material, as well as continuing to provide information and assistance with recycling of mercury-containing products to the general public. IWSA produced five videos in 2003 for each waste-to-energy plant, and these videos are available on the website. The videos show the unique and effective programs now in place to keep mercury containing products out of the waste stream.

i) Survey

The effectiveness of the regional education campaign is in large part measured by an annual research survey. The polling is designed to measure positive changes in public attitudes and behaviors, as well as the receptiveness of the message. The survey questionnaire was in the field June 27-29, 2005, and consisted of 400 completes, providing a 95% confidence level. The results showed that more people understood which household products contained mercury. In addition, fish advisory awareness scored its highest total in five years. Waste companies were viewed as the least responsible for the safe disposal of a mercury thermometer, compared to owners, manufacturers, and the government. The survey did find that exactly 60% of respondents would pay \$33-45 to replace a \$30 circular wall thermostat with a non-mercury replacement. In addition, another 20% would pay \$60 or more for the non-mercury replacement.

ii) Advertising

Analyzing past results, it was determined that the radio ads reached a greater target audience than the print advertisements in newspapers. Rather than purchasing one wave of radio advertisements, IWSA purchased two separate three-week radio buys in 2005 and advertised on radio stations that broadened our geographic outreach. Radio is a targeted medium that provides cost-efficient mass communication and built frequency of message delivery.

The first three-week radio buy was implemented June 6-26, 2005. Markets targeted by the radio buy were Boston, Worcester, New Bedford, and Cape Cod. In order to maximize the dissemination of the message, IWSA purchased another three-week radio buy that aired September 26 through October 16, 2005. Based on the results of the survey conducted after the radio ad, we believe the plan was successful in increasing public awareness. By transferring the budget for print advertising to a second radio wave almost five months later, we have broadened the opportunities for a successful campaign.

iii) **Web-based Tool**

The website, www.keepmercuryfromrising.org, is user-friendly and provides additional information:

The site provides navigation under the masthead and incorporates information in the following categories:

Home – includes background on Keep Mercury From Rising and information on calling 1-866-9MERCURY for more information about safe disposal options.

Drop-off sites – provides information on where to drop-off mercury containing items.

Spills – provides a variety of information on actions one should take in the event of a mercury spill.

FAQs – provides answers to five common questions.

Video/Audio – provides the five videos developed by the facilities as well as an audio file of the advertisement that aired for six weeks in 2005.

Links – links were proactively sought and added to this page and efforts were made to increase the number of other website that link to <http://www.keepmercuryfromrising.org>.

Contractors - contains useful information and links for sources of mercury related information.

iv) **Print Materials**

IWSA continued to make available education brochures and print information developed in 2000-2003. The basic “Keep Mercury From Rising” message is consistent with media formats.

v) **Video**

The five-minute “Keep Mercury from Rising” educational video was completed for each facility in 2003. The video explains the need to recycle mercury-containing products and the efforts undertaken by the state of Massachusetts and waste-to energy facilities to reduce the amount of mercury entering the environment.

The video now is being used at the five waste-to-energy facilities for educational purposes during tours and other meetings. Copies of the video have been made available to local cable access television stations and a “B-roll” of visuals and sound is available for media covering MSP events. Copies of the video also have

been given to local public officials to be shown at meetings, schools, senior citizen centers, and other organizations that would benefit from viewing the video. As noted above, the video also may be viewed at the website.

c) 2005 Estimates & Expenditures

<u>Activity</u>	<u>Estimated Cost</u>	<u>Actual Expenditure</u>
Survey	\$ 17,500	\$ 27,000
Media Buys	\$137,000	\$ 152,127
Website	\$ 2,000	\$ 987
Print	\$ 2,500	\$ 3,020
Video	\$ 1,000	\$ 0